

ARTICLE ____. TO DETERMINE WHETHER THE TOWN OF MAYNARD WILL VOTE TO ADOPT, OR AUTHORIZE THE BOARD OF SELECTMEN TO ADOPT, THAT PORTION OF THE STATE BUILDING CODE, 780 CMR APPENDIX 120AA, KNOWN AS THE MASSACHUSETTS STRETCH ENERGY CODE (“STRETCH CODE”), AS REQUIRED BY STATE REGULATION. THE KEY PROVISIONS OF THE STRETCH CODE ARE SUMMARIZED BELOW.

Summary of the Massachusetts Building Code Appendix 120.AA, “Stretch Code”

- 1. History.** Appendix 120.AA of the State Building Code, known as the “Stretch Code” was adopted by the Massachusetts Board of Building Regulations and Standards in May 2009, as an optional appendix.
- 2. Purpose.** The optional Stretch Code was developed in response to the call for improved building energy efficiency in Massachusetts. Towns and cities in the Commonwealth may adopt Appendix 120.AA in place of the energy efficiency requirements of the “base” building code. The Stretch Code mandates approximately 20% greater building energy efficiency.
- 3. Green Communities Act.** In 2008, Massachusetts adopted the Green Communities Act, Chapter 169 of the Acts of 2008, the purpose of which is to provide for renewable and alternative energy and energy efficiency in the Commonwealth. The Green Communities Act requires that Massachusetts adopt each new IECC within one year of its release. The IECC is updated on a three (3) year cycle. The next version will be IECC 2012, which is expected to be similar to the Stretch Code and required by the Commonwealth..
- 4. Effect.** The Stretch Code, 780 CMR 120 AA, may be adopted or rescinded by any municipality in the Commonwealth in the manner prescribed by law. When adopted by a municipality the Stretch Code, rather than 780 CMR 13, 34, 61, or 93, as applicable, shall govern.
- 5. Residential - New Construction.** New residential buildings three (3) stories or less will be required to meet an energy performance standard using the Home Energy Rating System (HERS).¹ The HERS index scores a home on a scale where 0 is a zero-net-energy home, and 100 is a code compliant new home (currently based on the IECC 2006 code). The HERS index has been in use for many years by programs such as Energy Star Homes, LEED for Homes, and by the Federal IRS for tax credits and energy efficient mortgages. HERS ratings are performed by an independent HERS rater, working with the home builder, and then submitted to the local building code official. The Stretch Code requires a HERS index of 65 or less for new homes of

¹For a summary of the HERS index see: http://www.energystar.gov/index.cfm?c=bldrs_lenders_raters.nh_HERS

3,000 square feet or above, and 70 or less for new homes below 3,000 square feet (this includes multi-family units in buildings of 3 stories or less). A HERS index of 65 means that the home is estimated to use 65% as much energy as the same home built to the 2006 energy code, or a 35% annual energy savings.

6. Residential – Home Renovations. Home additions and renovations have two options to meet the stretch code:

- * The same “performance” approach as new construction but requiring a HERS of 80 or less for significant changes to homes over 2,000 square feet, or 85 or less for homes below 2,000 square feet.
- * A “prescriptive” approach, where specific efficiency measures are required rather than HERS index number. This utilizes the Energy Star for Homes program prescriptive requirements, and insulation at least equal to IECC 2009.

7. Commercial –New Construction. The Stretch Code also applies a performance-based code to commercial buildings, with the option of a prescriptive code for small and medium-sized commercial buildings. Buildings smaller than 5,000 square feet are exempt, as are building renovations, and “specialty” buildings – supermarkets, laboratories, and warehouses – below 40,000 square feet in size, due to their widely differing energy needs. These exempt buildings remain subject to the “base” Massachusetts energy code (IECC 2009 and ASHRAE 90.1-2007), and all applicable Massachusetts amendments.

Comment [-1]: The question was raised as to what constitutes commercial and should we have a MGL or state reference? LEAVE TO CODE

- * Large buildings of any type over 100,000 square feet, and “specialty” buildings over 40,000 square feet are required to meet a performance standard set at 20% below the energy usage of the commonly used ASHRAE 90.1-2007 code, demonstrated through modeling by methods and software approved by the Commonwealth.
- * Medium-sized commercial buildings, which include residential buildings of 4 stories or more, but that are less than 100,000 square feet, have the option of meeting the same 20% better than ASHRAE 90.1-2007 performance standard, or using a simplified, prescriptive energy code.

Comment [-2]: Is this to be 2006? I TOOK THIS FROM THE STRETCH CODE SUMMARY OF DOER.

OR WHAT IT WILL DO IN RELATION THERETO.